The caterpillar during its last stage grows to a length of about 40 to 45 mm. and is stout and cylindrical though compressed a little dorsoventrally. The body surface is smooth. The general colour is bright to yellowish green according to that of the leaf surface. The ocelli, the four pairs of spines (3 thoracic and 1 abdominal) are blackish blue; the mesothoracic ones are considerably reduced to two small dark pinheads; the bases of the metathoracic ones have a crimson shade. The eight pairs of spiracles are clearly visible as grey spots over a yellowish green ground colour. Legs prolegs paler and greyish at tips, the latter very well provided with hooks and setæ.

Pupa.—The caterpillar changes into the chrysalis fixing itself by means of silk strands on the leaf stalk or branch carefully hidden from view, difficult to detect blending as it does with the colour of the pale green bark or stem. The chrysalis is about an inch in length and is more or less boat shaped with the conspicuous horn on the middle and narrowing towards each end; the tail end tapers and the head end is more or less flattish. The thoracic region is edged with a wavy brown border patch on each lateral side and these meet at the horn. The abdominal region is paler than the anterior half. The life-history roughly occupies about a month to five weeks. In the earlier caterpillar stages the creature is more or less like some limacodid caterpillars (Parasa, Contheyla, etc.).

It was not found breeding on any other food plant except *Champaca* in this region. Kershaw has recorded it from Hongkong breeding on Champaka and custard-apple and Senior White from Ceylon on *Anona*. There is however no record of its occurrence on this plant till now from South India.

Madras.

## T. V. RAMAKRISHNA AYYAR,

January 1938.

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## XVIII.—BIRDS EATING BUTTERFLIES.

I had very interesting experience on this trip. A Paradise Flycatcher (*Tchitrea paradisi* Linn.)—the Malay name is *Murai Rimba*, which means the robin of the big jungle—was very interested in certain butterflies which during the sunny part of the day fed on the edge of the pool where, no doubt, they found succulent juices from the large accumulations of elephants' dung. The bird I saw at first was the male; later on, another day, I saw both male and female.

The flycatcher stooped at the butterflies as they were feeding on the ground,—I am not sure whether a bird does 'stoop' at butterflies—and after many failures I saw him catch a Fritillary and take it away to a tree where he pulled or broke the wings off and then flew away with what was left.

I think the female was on a nest where there were possibly young, because later on I saw her catch a large White and take

it away. I saw these birds catch several butterflies, mostly Fritillaries, almost always on the ground but sometimes when the birds' swoop had disturbed them, on the wing. This is interesting in view of a paper lately read by Dr. Richmond Wheeler and published in the Proceedings of the Linnean Society, Session 151, April 1939, in which this matter was discussed. Wheeler was out here as a school master and I knew him well. I was always of the opinion that birds did not eat butterflies in Malaya and that was Wheeler's view too. This error was based on negative evidence. I know better now. I am writing to Wheeler telling him all about it, because although it destroys his previous convictions he is a big enough man to admit he was wrong and will be glad of my positive evidence. I saw these two birds on six days.

T. R. HUBBACK.

PAHANG,

FEDERATED MALAY STATES. August 6, 1939.

## XIX.—ON THE ROAD TO GERSOPPA AND BACK.

We decided on a short excursion to the Gersoppa Falls just at the break of the rains. To the layman, perhaps such a trip offers no thrills and no interests, but to naturalists it is full of experience. Nature is on the verge of rejuvenation and her children know the season and weather conditions even better than the most learned metreologist and finest instruments. An inherent 'something' drives them to prepare for the coming event-the monsoon. Birds move to drier or wetter climes as the conditions suit them—some to nests, others to dodge the rains: pupas of last season have matured and are on or about to take to wing: dormant plants are ready to sprout. Life is everywhere waiting to be released. Down comes the rain and it is in motion.

We left Bombay on the 4th June, 1938 in pouring rain. monsoon had broken earlier than usual in spite of forecasts. In fact, it had rained a few days previously and Nature around had answered in response—it was green on all sides below the ghats. The lean cattle greedily fed on the sprouting green followed by the ubiquitous Cattle Egret (Bubulcus ibis coromandus (Bodd.)) in full nuptial dress. Along promising streams, where pools had already collected, the Lesser Egret (Egretta i. intermedia (Wagler)) congregated in small parties were also in their wedding wrap, full of promise and busily intent on the small life in the pools. Among these and belonging to the same class was our 'Issac Walton of the Ponds', the Pond Heron (Ardeola gravii (Sykes)) in his best wedding suit waiting patiently for his breakfast.